Oracle® Enterprise Session Border Controller

Release Notes
Release ECZ7.1.0
Formerly Net-Net Enterprise Session Director

May 2015

ORACLE

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Contents

1 Release Notes..... 7

Oracle Enterprise Session Border Controller Description..... 7

Overview..... 7

Functions and Modes..... 7

Content Map..... 8

2 Platform Support..... 11

QoS NIU Version Requirement for AP3820 and AP4500..... 11

3 New Features 13

Advanced Logging..... 13

H.323..... 14

Inter-working Function (IWF)..... 14

Licensing..... 15

Management..... 15

Session Initiation Protocol (SIP)..... 15

Session Routing and Load Balancing..... 15

Simple Network Management Protocol (SNMP)..... 16

Transcoding..... 16

Other..... 16

4 Inherited Features..... 19

Inherited Features and Enhancements - E-C[xz]6.4.0 M1..... 19

Inherited Features and Enhancements - E-C[xz]6.4.0 M2..... 19

Inherited Features and Enhancements - E-C[xz]6.4.0 M3..... 20

Inherited Features and Enhancements - S-C[xz]6.3.9 M1..... 21

Inherited Features and Enhancements - S-C[xz]6.3.9 M2..... 21

Inherited Features and Enhancements - S-C[xz]6.3.9 M3..... 22

Inherited Features and Enhancements - S-C[xz]6.3.9 M4..... 22

5 Caveats..... 23

6 Known Issues..... 27

About this Guide

The Oracle Enterprise Session Border Controller Release Notes document provides information about:

- Platform Support
- New features
- Inherited Features
- Caveats
- Known Issues

Documentation Set

The following table describes the documentation set for this release.

Document Name	Document Description
ACLI Configuration Guide	Contains information about the installation, configuration, and administration of the Oracle Enterprise Session Border Controller.
Acme Packet 1100 Hardware Installation Guide	Contains information related to the hardware components, features, installation, start-up, operation, and maintenance of the Acme Packet 1100.
Web GUI Users Guide	Contains information about using the tools and features of the Oracle Enterprise Session Border Controller Web GUI.
Release Notes	Contains information about this release, including platform support, new features, caveats, known issues, and limitations.

Related Documentation

The following table describes related documentation for the Oracle Enterprise Session Border Controller.

Document Name	Document Description
Acme Packet 4500 Hardware Installation Guide	Contains information about the components and installation of the AP4500.
Acme Packet 3820 Hardware Installation Guide	Contains information about the components and installation of the AP 3800.
Acme Packet 6300 Hardware Installation Guide	Contains information about the components and installation of the AP 6300.
Acme Packet 6100 Hardware Installation Guide	Contains information about the components and installation of the AP 6100.
Release Notes	Contains information about the current documentation set release, including new features and management changes.
ACLI Configuration Guide	Contains information about the administration and software configuration of the Oracle Enterprise Session Border Controller.
ACLI Reference Guide	Contains explanations of how to use the ACLI, as an alphabetical listings and descriptions of all ACLI commands and configuration parameters.
Maintenance and Troubleshooting Guide	Contains information about Oracle Enterprise Session Border Controller logs, performance announcements, system management, inventory management, upgrades, working with configurations, and managing backups and archives.

Document Name	Document Description
MIB Reference Guide	Contains information about Management Information Base (MIBs), Acme Packet's enterprise MIBs, general trap information, including specific details about standard traps and enterprise traps, Simple Network Management Protocol (SNMP) GET query information (including standard and enterprise SNMP GET query names, object identifier names and numbers, and descriptions), examples of scalar and table objects.
Accounting Guide	Contains information about the Oracle Enterprise Session Border Controller's accounting support, including details about RADIUS accounting.
HDR Resource Guide	Contains information about the Oracle Enterprise Session Border Controller's Historical Data Recording (HDR) feature. This guide includes HDR configuration and system-wide statistical information.
Administrative Security Essentials	Contains information about the Oracle Enterprise Session Border Controller's support for its Administrative Security license.
Security Guide	Contains information about security considerations and best practices from a network and application security perspective for the Oracle Enterprise Session Border Controller family of products.

Revision History

The following table describes updates to this guide.

Date	Description
September 2014	Initial Release
September 2014	Corrected the New Features section.
October 2014	• Corrected the "Configuration Acquisition" topic in the Caveats section. • Added the "Ringback" item to the Caveats section.
February 2015	• Changes the "Ringback" Caveat to "Local Media Playback" and notes the upgrade issue.
March 2015	• Adds the SIP-KPML item to the Known Issues section.
May 2015	• Removes Hyper-V support. • Adds a Caveat for Web GUI and IPv4-IPv6.

1

Release Notes

Oracle Enterprise Session Border Controller Description

The Oracle Enterprise Session Border Controller (E-SBC) connects disparate Internet Protocol (IP) communications networks while mitigating security threats, curing interoperability problems, and ensuring reliable communications. The E-SBC protects and controls real-time voice, video, and Unified Communications (UC) as they traverse IP network borders.

Overview

Available in software and appliance configurations, the E-SBC is highly scalable and includes an industry-leading feature set.

- Strong security. While the E-SBC protects IP telephony and UC infrastructure, services, and applications, it ensures confidentiality, integrity, and availability. The E-SBC prevents fraud and service theft, and guards against malicious attacks, system overloads, and other service-affecting events.
- Easy interoperability. The E-SBC provides extensive signaling and media control features to help businesses overcome interoperability challenges that commonly occur when interfacing with public IP network services. It also performs protocol interworking and dial plan management for integration with legacy systems.
- Assured reliability. The E-SBC ensures Public Switched Telephone Networks (PSTN)-like availability and service quality for IP communications. The E-SBC enforces service quality, balances loads across trunks, and reroutes sessions around interface disruptions to optimize network performance, circumvent equipment and facility problems, and to ensure business continuity.

Functions and Modes

Businesses install the E-SBC at Session Initiation Protocol (SIP) network borders, where enterprise communications systems interface with public network services and where disparate multi-vendor systems must be managed.

Customers use the E-SBC to:

- Connect to SIP trunking services and the Internet
- Access communications services
- Communicate securely with remote workers
- Manage sessions across a multi-vendor UC environment
- Connect contact center locations and Business Process Outsourcing (BPO) services

Content Map

The following table lists the new features and enhancements in Release E-CZ7.1.0.

Content Type	Description
Adaptation	Advanced Logging
Adaptation	H.323 • H.235 encryption • Video conferencing support for Polycom terminals
Adaptation	Interworking Function (IWF) • Flow control mapping for IWF video
Adaptation	Licensing • Constraints
Adaptation	Management • Message rate statistics
Adaptation	Session Initialization Protocol • RFC 4028 session timers • SIP Replaces header support • SIP timers: discrete configuration
Adaptation	Session routing and load balancing • Local route table (LRT) performance
Adaptation	Simple Network Management Protocol (SNMP) • Persistent indexing of SNMP tables
Adaptation	Transcoding • Asymmetric payload type support for RFC2833 interworking • Conditional codec policy enhancements • DTMF indication over HD audio codecs • Locally generated RTCP for transcoded calls • RFC2833 and KPML interworking • SNMP retrieval of transcoding statistics • Software Transcoding • Transcoding support for asymmetric payload types
Adaptation	Other • Admin security • Authenticated Network Time Protocol (NTP) • ETC monitoring • IPv6 support for static flow • Security • Session Description Protocol (SDP) alternate connectivity

Content Type	Description
	• Symmetric multiprocessing (SMP) task aware load limiting • System Programming Language (SPL) • Persistent log files

2

Platform Support

The following platforms support the E-CZ7.1.0 release.

- Oracle: AP3820 and AP4500
- Virtual Machine Edition: VMWare

Release Image File Names

Use the following files for a new deployment.

Oracle Hardware

- Image: nnECZ710.64.bz for the AP4500 and nnECZ710.32 .bz for the AP 3820
- Boot loader: July 2013 or newer

Virtual Machines

- VMWare: nnECZ710.64-img-bin.ova

Upgrade Image File Names

Use the following files to upgrade virtual machine deployments.

- Image: nnECZ710.64.bz
- Boot loader: nnECZ710.64.boot

QoS NIU Version Requirement for AP3820 and AP4500

A Network Interface Unit (NIU) that supports the Quality of Service (QoS) feature group on the AP 3820 and AP 4500, except the two Enhanced Traffic Control (ETC) cards, requires QoS Field Programmable Gate Array (FPGA) revision 2.19 for the E-CZ7.1.0 release. The 2.19 FPGA upgrade image is available at My Oracle Support, *https://support.oracle.com/*, with a customer account.

If the QoS FPGA hardware revision is lower than 1.109, you need to upgrade the hardware. Use the **show qos revision** command on the ACLI to find the QoS FPGA hardware revision number.

```
ACMEPACKET# show qos revision
QoS FPGA Hardware Revision is 1.109
ACMEPACKET#
```

3

New Features

The baseline for the E-CZ710 release is the E-CZ6.4.0 GA release. The E-CZ710 release adds the following enhancements and new features to the E-CZ6.4.0 GA release.

- Advanced Logging
- H.323
- Inter-Working Function (IWF)
- Licensing
- Management
- Session Initiation Protocol (SIP)
- Session Routing and Load Balancing
- Simple Network Management Protocol (SNMP)
- Transcoding
- Other

Advanced Logging

Advanced Logging allows targeted logging by over riding log levels, so that only a specific SIP request and its related messages are logged. The system matches criteria that you configure to determine which requests to log. The system also logs all messages related to the request, such as any responses, in-dialog messages, media, timers, and so on. Advanced Logging supports multiple matching criteria for incoming requests and rate limiting. Advanced log files are smaller than debug files because the system logs only the specified number of matches in the specified period of time. Since the files are smaller, Advanced Logging uses fewer system resources than debug logging. To make searching easier, the system labels each log.

You can deploy advanced logging by one or both of the following methods.

- Configure mode. Define sip-advanced-logging under session-router. This method reconfigures the system and the configuration persists after a system reboot.
- Command line. From the Advanced Logging SPL plug-in that is included in the software, you can enable, start, and stop advanced logging without changing the system configuration. When configured from the command line, advanced logging does not persist after a system reboot.

Note: Configure mode and Command Line are separate deployment methods that do not depend on each other or affect each other.

The system provides the following options for configuring the scope of advanced logging.

- Request-only. Logs only the matched message.

- Transaction. Logs only the request and the response.
- Session. Logs the matched message and anything else related to the session.
- Session and Media. Logs the matched message, anything related to the session, and media.

The system provides the following options for configuring the advanced logging criteria.

- Received Session-Agent. By IP address or hostname
- Request Type. Such as INVITE vs. SUBSCRIBE
- Received Realm Name.
- Request URI. User and host. Limited to 2 condition entries, when using both types.
- To header. User and host. Limited to 2 condition entries, when using both types.
- From header. User and host. Limited to 2 condition entries, when using both types.
- Call-id. Matches the Call-id header.
- Rate Limiting. By specified number of matched requests over a specified period of time.
- Scope of Logging. Options include Request Only, Transaction, All Relating to Session, All Relating to Session and Media.

H.323

This release includes the following new H.323 features.

H.235 Encryption

Following the ITU-T H.235 encryption standard, the Oracle Enterprise Session Border Controller allows encrypted audio, video, and data to pass through it to support confidentiality in video conferencing applications.

The Oracle Enterprise Session Border Controller allows the following:

- H.245Teminal CapabilitySet
- H.245 TerminalCapabilitySet
- H.245 OpenLogicalChannel and OpenLogicalChannelAck

Video Conferencing Support for Polycom Terminals

The Oracle Enterprise Session Border Controller relays H.239/H.245 in a video conferencing environment with Polycom H.323 terminals and a Polycom Multipoint Conferencing Unit (MCU) . The Oracle Enterprise Session Border Controller implements the following messages.

- Miscellaneous command message with subtype such as multiPointModeCommand, cancelMultipointModeCommand
- Conference indication message with subtype such as terminalNumberAssign, terminalYouAreSeeing

Inter-working Function (IWF)

This release includes the following IWF feature.

Flow Control Mapping for IWF Video

In an H.323 environment, the Oracle Enterprise Session Border Controller previously used the FlowControlCommand to map to SIP using either the Real-Time Control Protocol (RTCP) feedback function or the SIP signaling path, for example, the INFO method. In the E-CZ7.1.0 release, the Oracle Enterprise Session Border Controller supports the SIP counterpart of the H.245 FlowControlCommand using the SIP signaling path with the INFO method. The Oracle Enterprise Session Border Controller sends the SIP INFO message with "change_bitrate" rate parameter that has the value 100* maxBitRate from the corresponding H.245 FlowControlCommnad message.

Licensing

This release includes the following license constraint.

- A license is required for SRTP.

Management

This release includes the following management feature.

Message Rate Statistics

The Oracle Enterprise Session Border Controller provides message rate statistics for SIP, DNS, and ENUM traffic. Statistics are available at the ACLI and via HDR.

For more information, see following guides.

- ACLI Output section in the Performance Management chapter in the Maintenance and Troubleshooting Guide.
- HDR Output section in the HDR Groups and Group Statistics chapter in the HDR Resource Guide.

Session Initiation Protocol (SIP)

This release includes the following SIP features.

SIP Replaces Header Support

The Oracle Enterprise Session Border Controller supports the Replaces: header in SIP messages according to RFC 3891. The header, included in SIP INVITE messages, provides a mechanism to replace an existing early or established dialog with a different dialog that can be used for services such as call parking, attended call transfer, and various conferencing features.

SIP Timers: Discrete Configuration

Previous releases controlled SIP timers with a single ACLI command, trans-expire. A new ACLI command, initial-inv-trans-expire, enables control over SIP Timer B for initial INVITE transactions. Other timers, for example, B for non-initial INVITEs, D, F, H, and J remain under the control of trans-expire. Use initial-inv-trans-expire in the sip-config configuration mode to establish a global, default transaction timeout value exclusively for initial INVITE transactions.

RFC 4028 Session Timers

The Oracle Enterprise Session Border Controller supports RFC 4028 Session Timers. The Oracle Enterprise Session Border Controller acts as a B2BUA between two endpoints and enforces the timer values on each call leg independently.

Session Routing and Load Balancing

This release includes the following session routing and load balancing feature.

Local Route Table (LRT) Performance

Capabilities

- Loads approximately 500 LRT tables during boot time
- Loads 100,000 entries per LRT file

- Loads 2,000,000 LRT entries total per system

Constraints

- You cannot configure the Oracle Enterprise Session Border Controller with 500 LRT files each with 100,000 entries.
- Actual performance that affects the interaction among the three performance attributes varies with system memory and configuration.

Simple Network Management Protocol (SNMP)

This release includes the following SNMP feature.

Persistent Indexing of SNMP Tables

Certain Acme Packet proprietary MIB tables support persistent indexing across reboots. The purpose is to maintain the value of that object, so that after a reboot or configuration reload the value that identifies an object remains the same.

For more information, see the Acme Packet MIBs chapter in the MIB Reference Guide.

Transcoding

The E-CZ7.1.0 release includes the following transcoding features.

Transcoding

The Oracle Enterprise Session Border Controller supports IP-to-IP transcoding for SIP sessions, and can connect two voice streams that use different coding algorithms with one another.

Transcoding Support for Asymmetric Payload Types

Transcoding Support for Asymmetric Dynamic Payload Types supports the case when asymmetric payload types such that the RTP offered with one payload type and answered with another payload type will be acceptable to the Oracle Enterprise Session Border Controller when performing transcoding.

Other

The E-CZ7.1.0 release includes the following features.

Admin Security

A new Admin Security APC license is available for the Oracle Hardware Edition, which works in conjunction with a previously installed Admin Security license to enhance password strength requirements in certain high security environments. Enhanced password strength requirements depend on the presence of both the Admin Security license and the Admin Security ACP license. The Virtual Machine (VM) Edition does not support the Admin Security APC license.

For more information, see System Management in the Maintenance and Troubleshooting Guide.

Authenticated Network Time Protocol (NTP)

The Oracle Enterprise Session Border Controller can authenticate NTP server requests using MD5. The configured MD5 keys are encrypted and obscured in the ACLI. You configure an authenticated NTP server with its IP address, authentication key, and key ID. The corresponding key and key ID are provided by the NTP server administrator.

For more information, see Authenticated NTP in the Configuration Guide.

ETC Monitoring

The Net-Net SBC can monitor the average load and memory usage of an Enhanced Traffic Control (ETC) NIU card data core. Any excessive load is reported as an alarm, independently for CPU load and memory usage. When data core or memory usage rises above a set threshold, an alarm is enabled and a trap is sent. No new calls are accepted by the system until the alarm is cleared.

For more information, see Fault Management in the Maintenance and Troubleshooting Guide.

IPv6 Support for Static Flow

The Oracle Enterprise Session Border Controller supports the following types of IPv6 static flows.

- IPv6 to IPv6
- IPv4 to IPv6

For more information, see the following sections in the Configuration Guide:

- Static Flows
- Basic Static Flow Configuration Overview
- IPV6 / IPv4 Translations

Security

A DDoS attack could be crafted such that multiple devices from behind a single NAT could overwhelm the Oracle Enterprise Session Border Controller. The Oracle Enterprise Session Border Controller would not detect this as a DDoS attack because each endpoint would have the same source IP but multiple source ports. Because the Oracle Enterprise Session Border Controller allocates a different CAM entry for each source IP:Port combination, this attack is not detected. This feature remedies such a possibility.

For more information, see DDoS Protection from Devices Behind a NAT in the Configuration Guide.

Session Description Protocol (SDP) Alternate Connectivity

The Oracle Enterprise Session Border Controller can create an egress-side SDP offer containing both IPv4 and IPv6 media addresses by way of a mechanism that allows multiple IP addresses of different address families (i.e., IPv4 & IPv6) in the same SDP offer. The implementation is based on the RFC draft "draft-boucadair-mmusic-altc-09".

For more information, see SDP Alternate Connectivity in the Configuration Guide.

Symmetric Multiprocessing (SMP) Task Aware Load Limiting

The Oracle Enterprise Session Border Controllercan determine aggregate load in its SMP environment, so that resources are evenly spread across all CPUs. Applications can decrease their load when necessary.

For more information, see Performance Management in the Maintenance and Troubleshooting Guide.

System Programming Language (SPL)

The E-CZ7.1.0 release supports SPL engine 3.1.1.

Persistent Log Files

Net-Net OS Version E-CZ7.1.0 supports persistent log files. Log files are used to monitor system events. After a reboot, the logs are still available on the file system, subject to certain constraints. The logs are stored in /opt/logs by default. Log files are not persistent unless a storage device (HDD) is installed in your hardware.

For more information, see Performance Management in the Maintenance and Troubleshooting Guide.

4

Inherited Features

Between major releases, Oracle provides incremental maintenance releases that contain new features. The following list describes features that were included in the maintenance releases and are included all together for the fist time in this major release.

Inherited Features and Enhancements - E-C[xz]6.4.0 M1

The following feature enhancements, which were introduced in the E-C[xz]6.4.0 M1 release, are included in the E-C7.1.0 release.

New Quit Command in Configuration Mode

The Quit command reduces the number of steps required to return to the Oracle Enterprise Session Border Controllerroot prompt after saving the configuration.

See "Quit Command in Configuration Mode " in the *ACLI Configuration Guide*.

Save and Activate Notification

The Save button on the Web GUI saves the current configuration in both the Basic and Expert Modes and displays a prompt with the option to activate the configuration.

See "Save and Activate Notification" in the *Web GUI User Guide*.

Update the Configuration Schema from the Web GUI

After upgrading the Web GUI software from E-C[xz]6.4.0 GA to any subsequent release, the system displays a schema update prompt after first logon to the GUI. Updating the schema adds any new parameters to each configuration screen in Basic Mode. The update prompt displays each time you log onto the Web GUI, until you update the configuration schema.

See "Update the Configuration Schema" in the *Web GUI User Guide*.

Inherited Features and Enhancements - E-C[xz]6.4.0 M2

The following feature enhancements, which were introduced in the E-C[xz]6.4.0 M2 release, are included in the E-C7.1.0 release.

New Home Page in the Web GUI

The Web GUI displays a new Home tab, which displays a Dashboard. On the Dashboard, you can add widgets to display Session Initiation Protocol (SIP) statistics in graphs. You can customize the Dashboard by adding, deleting, and moving the widgets. You can also refresh the statistics on the Dashboard, or reset the Dashboard to its default display.

See "New Home Page in Web GUI" in the *Web GUI User Guide*.

Remote Site Survivability

A Remote Office/Branch Office (ROBO) of the Oracle Enterprise Session Border Controller can detect the loss of communication over SIP-based telephony to the Enterprise's core call processing Data Center. When loss of communication is detected over the SIP service, the Oracle Enterprise Session Border Controller ROBO dynamically switches into Survivable Mode. In Survival Mode, the system handles call processing locally and provides limited additional server functionality.

Remote Site Survivability supports SIP only. It does not support the H.323

The following characteristics describe the Remote Site Survivability feature.

- Works with or without High Availability (HA) operation
- Configurable in real-time - no reboot required to enable this feature
- Allows configuration of the feature from the Oracle Enterprise Session Border Controller
- Maintains Historical Recording (HDR) statistics about being in survivability mode

See "Remote Site Survivability" in the *ACLI Configuration Guide*.

Inherited Features and Enhancements - E-C[xz]6.4.0 M3

The following feature enhancements, which were introduced in the E-C[xz]6.4.0 M3 release, are included in the E-C7.1.0 release.

Web GUI Search

The Search function is added to the Web GUI for the Basic Configuration mode. You can search for a Basic Configuration object by name and attribute value.

See "Web GUI Search" in the *Web GUI User Guide*.

Web GUI Shortcut Keys

The following tables list the new shortcut key commands for the Home page and the Configuration page on the Web GUI.

Home Page	Shortcut Key Command
Add a Widget	Ctrl+Shift+a
My Dashboard	Ctrl+Shift+m
Refresh	Ctrl+Shift+r
Stats Portal	Ctrl+Shift+p

Configuration Page	Shortcut Key Command
Discard	Ctrl+Shift+d
Save	Ctrl+Shift+s

Configuration Page	Shortcut Key Command
Search	Ctrl+Shift+e

See "Web GUI Shortcut Keys" in the *Web GUI User Guide*.

Inherited Features and Enhancements - S-C[xz]6.3.9 M1

The following feature enhancements, which were introduced in the S-C[xz]6.4.0 M1 release, are included in the E-C7.1.0 release.

Palladion Probe Enhancement

The operation of software-based Palladion probes is simplified by enabling the transmission of IPFIX data to one or more Palladion Mediation Engines, possibly on different sub-nets.

See "Palladion Probe Enhancement" in the *ACLI Configuration Guide*.

SIP Monitor and Trace Enhancements

Performance enhancements were made to the SIP Monitor and Trace functionality in the Web GUI.

The monitoring-filters object for SIP Monitor and Trace to trigger interesting-events must be configured by way of the ACLI.

See "SIP Monitor and Trace Enhancements" in the *ACLI Configuration Guide*.

Inherited Features and Enhancements - S-C[xz]6.3.9 M2

The following feature enhancements, which were introduced in the S-C[xz]6.3.9 M2 release, are included in the E-C7.1.0 release.

Personal Profile Manager (PPM) Proxy

The Oracle Enterprise Session Border Controller incorporates an application proxy for certain unroutable messages from remote clients by replacing the internal IP addresses with the Oracle Enterprise Session Border Controller external SIP interface IP address.

See the "Personal Profile Manager (PPM) Proxy" in the *ACLI Configuration Guide*.

SIPREC Ping Support

You can check the connectivity between the Oracle Enterprise Session Border Controller and the Session Recording Server (SRS) using two new, optional ping commands from the ACLI.

- ping-method - SIP message or method for which to ping the SRS.
- ping-interval - Amount of time, in seconds, that the Oracle Enterprise Session Border Controller waits before it pings the SRS in subsequent intervals. For example, if this parameter is set for 60 seconds, the Oracle Enterprise Session Border Controller pings the SRS every 60 seconds.

See "SIPREC Ping" in the *ACLI Configuration Guide*.

SIPREC Re-INVITE Collision and Back-off Support

To avoid an INVITE collision, the Oracle Enterprise Session Border Controller sends a 491 Request Pending response back to the SRS and waits for a random amount of time before re-trying the INVITE. The Oracle Enterprise Session Border Controller also acknowledges (ACK) any 491 response received from the other side. RFC 3261 and RFC 6141 describe the way the User Agent (UA) resolves the INVITE collision.

See "SIPREC Re-INVITE Collision and Back-off Support" in the *ACLI Configuration Guide*.

Inherited Features and Enhancements - S-C[xz]6.3.9 M3

There are no features and enhancements inherited from the S-C[xz]6.3.9 M3 release in the E-C7.1.0 release.

Inherited Features and Enhancements - S-C[xz]6.3.9 M4

The following feature enhancement, which was introduced in the S-C[xz]6.4.0 M4 release, is included in the E-C7.1.0 release.

Session Border Controller Deployment Behind a Network Address Translation (NAT) Device

The S-C[xz]6.3.9M4 release provided the Support for SBC Behind NAT SPL plug-in for deploying the Oracle Enterprise Session Border Controller on the private network side of a NAT device. The Support for SBC Behind NAT SPL plug-in changes information in SIP messages to hide the end point located inside the private network. The specific information that the Support for SBC Behind NAT SPL plug-in changes depends on the direction of the call, for example, from the NAT device to the SBC or from the SBC to the NAT device.

See "Session Border Controller Deployment Behind a Network Address Translation (NAT) Device " in the *ACLI Configuration Guide*.

5

Caveats

The following notes explain cautionary details to consider when using the E-CZ7.1.0 release.

Admin Security

The Virtual Machine (VM) Edition does not support the Admin Security APC license.

Archive Logs

Archiving log files is not supported on AP3820 and AP4500 platforms without a Hard Disk Drive installed.

Configuration Acquisition

Local password encryption is changed, which affects system behavior when using the acquire-config command in a downgrade scenario.

For example, if you install E-CZ7.1.0 and downgrade to any prior release, the system retains the E-CZ7.1.0 behavior.

The acquire-config command cannot work if the system from which you attempt to acquire the configuration has not been upgraded to E-CZ7.1.0, even temporarily. This is because the acquisition target uses the old encryption method.

The E-CZ7.1.0 security behavior does not affect redundancy operations. A redundant pair can synchronize with different password methods.

Dual-Tone Multi-Frequency (DTMF) Interworking

RFC 2833 interworking with H.323 is not supported.

SIP-KPML to RFC2833 conversion is not supported for transcoded calls.

Enhanced Security Measures

The system resets all local passwords to the default settings during an upgrade to the E-CZ7.1.0 release.

Fragmented Ping Support

The Oracle Enterprise Session Border Controller does not respond to inbound fragmented ping packets.

FTP Support

The Oracle Enterprise Session Border Controller FTP Server is deprecated. Only SFTP server services are supported.

FTP Client access for features such as HDR/CDR push remains.

H.248

The Border Gateway and H.248 functionality are not supported.

H.323 Signaling Support

If H.323 and SIP traffic are both run in the system, configure each protocol in its own separate realm.

Hardware Support

AP3820 and AP4500 hardware with BoardRev: 3.00 does not support the GA release of E-CZ7.1.0. Use the show version boot command and view the Mainboard Info section, BoardRev: attribute.

HMR action on Call-ID

HMR operations on the Call-ID: header are deprecated.

Local Media Playback

Local media playback SPL, commonly used for Ringback, is not supported in this release. Note this difference when upgrading from the E-C[xz]6.4.0 release, where this functionality is supported.

Media Hairpinning

Media hairpinning is not supported for hair-pin/spiral call flows involving both H.323 and SIP protocols.

MGCP Signaling Support

MGCP Signaling is not supported.

Packet Trace

Output from the packet trace local feature on hardware platforms running this software version may display invalid MAC addresses for signaling packets.

Phy Link Redundancy

Phy link redundancy is not supported.

Physical Interface RTC Support

After changing any Physical Interface configuration element parameters, a system reboot is required.

Real Time Control Protocol (RTCP) Packet Loss

The Quality of Service (QoS) measurement for RTCP is inaccurate in the Virtual Machine (VM) Edition. In the Oracle Hardware Edition, the QoS measurement for RTCP is accurate.

Session Replication for Recording

Session Replication for Recording is not supported.

T.38 Fax Transcoding

T.38 Fax transcoding is available for G711 only at 10ms, 20ms, 30ms ptimes.

Fax codec policy is based on D7.0 fax transcoding policy.

Pooled Transcoding for Fax is not supported.

Transcoding - general

Only SIP signaling is supported with transcoding.

Codec policies can only be used with realms associated with SIP signaling.

Transcoding is not available in conjunction with SRTP.

Quality of Service (QoS) is not supported for transcoded calls.

SIPREC may not be performed on a transcoded call.

Web GUI and IPv4-IPv6 Support

The Web GUI supports only IPv4.

6

Known Issues

The following list describes known issues in the E-CZ7.1.0 release.

AP4500 with an ETC v1 Card

An AP4500 with an Enhanced Traffic Controller (ETC) version 1 card may become unresponsive after multiple HA switch-overs over a period of time. Reboot the system.

AP4500 with an ETC v2 Card

When an AP4500 with an Enhanced Traffic Controller (ETC) version 2 card is connected to a D-Link switch, the physical interface may become inactive. Reboot the system.

Default Dashboard Display

The default dashboard may not display data until SIP is enabled.

ECX637 Upgrade

When upgrading from ECX637 to ECZ710, the CPU load may prevent the primary Oracle Enterprise Session Border Controller from booting. Perform the upgrade when the load on the CPU is light.

High Availability (HA) Synchronization

HA Synchronization is disabled on the Dashboard widgets.

Datapath Error

The system may become unstable when the Distributed Denial of Service (DDoS) threshold is set too high.

MBCD Errors

The system may display MBCD errors during SIPREC calls. These errors are benign.

RFC2833 to UII Interworking

SIP-H323 hairpin calls with Dual-tone Multi-frequency (DTMF) tone indication interworking is not supported.

SIP-KPML

SIP-KPML to RFC 2833 conversion for DTMF events is not supported in this release.

SRTP

Using the Secure Real-time Transport Protocol (SRTP) Session Description Protocol Security Descriptions (SDES) feature in single SRTP termination mode on an AP4500 with a HIFN PHY may cause the Oracle Enterprise Session Border Controller (ESBC) to become unresponsive. Perform a "power reboot" on.